1. A method of detecting an HIV-infected cell from a mammal undergoing combination anti-HIV drug therapy, the method comprising detecting an HIV 2-LTR circle DNA molecule obtained from a cell of the mammal, wherein the presence of a 2-LTR circle DNA indicates an HIV-infected cell.

2. The method of claim 1, further comprising amplifying the DNA molecule before the detecting step.

3. The method of claim 2, wherein the DNA molecule is amplified using polymerase chain reaction.

4. The method of claim 1, wherein the drug therapy comprises administering to the mammal at least one HIV reverse transcriptase inhibitor.

5. The method of claim 4, wherein the drug therapy further comprises administering to the mammal at least one HIV protease inhibitor.

6. The method of claim 1, wherein the drug therapy comprises administering to the mammal at least one HIV protease inhibitor.

7. The method of claim 1, wherein the mammal is an HIV-1-positive mammal.

8. The method of claim 7, wherein the mammal is a human.

9. The method of claim 1, wherein the mammal is a human.

10. The method of claim 1, wherein the cell is a peripheral blood mononuclear cell.

11. The method of claim 1, wherein cell-free HIV viral RNA cannot be detected in the blood of the mammal.

12. A method of detecting an HIV-infected cell in a mammal, the method comprising detecting an HIV 2-LTR circle DNA molecule obtained from a cell of a mammal, wherein cell-free HIV viral RNA cannot be detected in the blood of the mammal, and wherein the presence of a 2-LTR circle DNA indicates a HIV-infected cell.

13. The method of claim 12, further comprising amplifying the DNA molecule before the detecting step.

14. The method of claim 13, wherein the DNA molecule is amplified using polymerase chain reaction.

15. The method of claim 12, wherein the mammal is an HIV-1-positive mammal.

16. The method of claim 15, wherein the mammal is a human.

17. The method of claim 12, wherein the mammal is a human.

18. The method of claim 12, wherein the cell is a peripheral blood mononuclear cell.

19. A method of detecting an HIV-1-infected peripheral blood mononuclear cell (PBMC) in an individual, the method comprising

amplifying an HIV-1 2-LTR circle DNA molecule obtained from a PBMC of an HIV-1-positive individual undergoing combination anti-HIV-1 drug therapy, to produce an amplified nucleic acid, wherein cell-free HIV-1 viral RNA cannot be detected in the blood of the individual; and

detecting the amplified nucleic acid, wherein the presence of the amplified nucleic acid indicates the presence an HIV-infected PBMC.

20. A method of claim 1, further comprising obtaining the HIV 2-LTR circle DNA molecule using an alkaline lysis method.

21. A method of claim 3, wherein the primers used for PCR comprise a (-) strand primer spanning nucleotides 9591 to 9610 of the HXB2 strain of HIV-1, and a (+) strand primer spanning nucleotides 9650-9669 of the HXB2 strain of HIV-1.

22. A method of treatment for HIV infection in a mammal, the method comprising

administering to the mammal one or more anti-HIV agents in an amount effective to reduce an HIV viral load in the mammal; and

detecting HIV-infected cells in the mammal using the method of claim 1,

wherein treatment is continued until the level of HIV-infected cells falls below 1 in one million peripheral blood mononuclear cell.